

DOCKET NO: 291263US0PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
STEPHAN SCHLITTER, ET AL. : EXAMINER: NGUYEN, CAM N.
SERIAL NO: 10/580,950 :
FILED: MAY 30, 2006 : GROUP ART UNIT: 1793
FOR: CATALYST EXTRUDATES BASED :
ON COPPER OXIDE AND THEIR USE
FOR HYDROGENATING CARBONYL
COMPOUNDS

DECLARATION UNDER 37 C.F.R. §1.132

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Now comes Olga Schubert who deposes and states:

1. That I studied chemistry at the Altay State University, Barnaul, Russia from 1992 to 1997 and I am a graduate of Vienna Technical University, Vienna, Austria having received a Ph.D degree in the year 2001.
2. That I have been employed by BASF since 2002 as a researcher in the field of catalyst chemistry.
3. That I understand the English language or, at least, that the contents of the Declaration were made clear to me prior to executing the same.
4. That the following experiments were carried out by me or under my direct supervision and control.

5. These experiments compare the structure of the catalyst according to the invention with that of the catalyst of Example 2 in U.S. Patent No. 6,730,800, which contains 60% copper oxide and 40% of aluminum oxide (col. 12, lines 35-36) but is intimately mixed with **graphite** (see col. 10, line 41). Graphite is used as a auxiliary/binder and is chemically distinct from the oxidic support material, aluminum oxide.

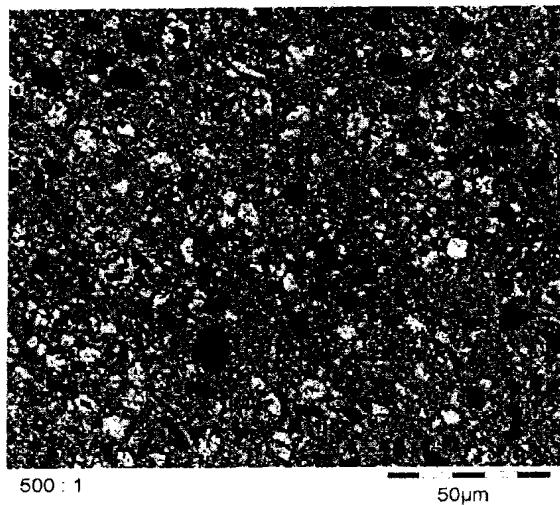
6. The active catalyst of the invention was made as disclosed in Example 2 in the specification and comprises active mixing with **boehmite** (specification, page 11, lines 31 to page 12, line 3) instead of graphite to produce an extrudate. In this process the aluminum oxide is **both a binder and a component** of the active catalyst composition.

The active catalyst comprises about 61 % by weight CuO and 39 % by weight Al₂O₃ (Example 2, page 11, lines 28-29) but is mixed with **boehmite** not graphite and formed to extrudates comprising 50 % by weight CuO and 50 % by weight Al₂O₃. Boehmite is a binder that is Al₂O₃ and indistinct from the oxidic support material.

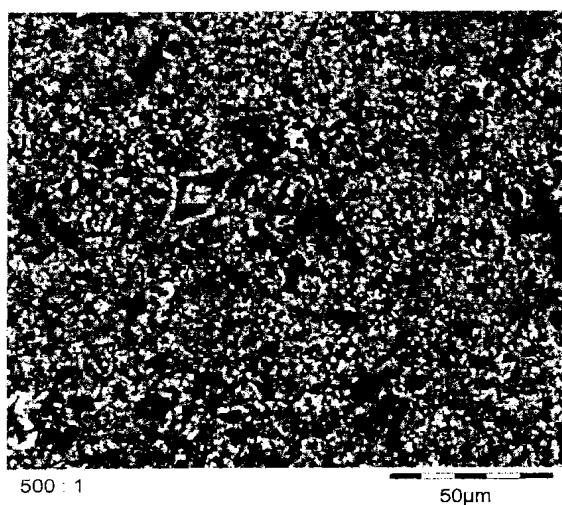
7. The composition according to U.S. Patent No. 6,730,800 was made according to Examples 1 and 2 in that patent.

8. The electron micrographs of each catalyst shown below show clear structural differences between them.

U.S. Patent Application No. 10/580,950



Example 2a
US 6,730,800



9. Review of these micrographs shows:

- The scanning electron micrograph of the comparative catalyst according to Example 2 of US 6,730,800 is much more homogeneous than the catalyst of the invention.
- The dark regions of the catalyst according to Example 2 of our invention are round spots and virtually only aluminum is detected by means of EPMA in the dark regions.
- By contrast, the dark regions of the catalyst according to US 6,730,800 are of different shape. No aluminum could be detected. It is assumed that these dark regions were formed during the processing of the starting materials with the auxiliary graphite to form shaped catalysts. The dark regions seem to be pores of the catalyst.

10. The undersigned petitioner declares further that all statements made herein of her own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

11. Further deponent saith not.

O. Schubert
Signature

02.02.2010
Date